

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: John J. Guarnicello Examiner #: J. Guarnicello Date: 1/14/2004
 Art Unit: 1771 Phone Number 30 272-1476 Serial Number: 09/28/089
 Mail Box and Bldg/Room Location: Rensselaer 568 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

*See attached claims
 search requested by
 spe for possible follow-up.
 a due case: Please Expedite!*

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: _____	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: _____	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

09/281089

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.63	0.63

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 06:01:59 ON 21 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 21 Jan 2004 VOL 140 ISS 4
FILE LAST UPDATED: 20 Jan 2004 (20040120/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s textile

75943 TEXTILE
97885 TEXTILES

L1 128127 TEXTILE
(TEXTILE OR TEXTILES)

=> s(iron oxide hydroxide or ferric hydroxide oxide or hydrated ferric oxide or goethite or lepidocrocite or limonite)

S(IRON IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s iron(l)oxide(l)hydroxide

871747 IRON
10990 IRONS
872511 IRON
(IRON OR IRONS)

1442415 OXIDE
315845 OXIDES
1534995 OXIDE
(OXIDE OR OXIDES)

238454 HYDROXIDE
41334 HYDROXIDES
258965 HYDROXIDE
(HYDROXIDE OR HYDROXIDES)

L2 6084 IRON (L) OXIDE (L) HYDROXIDE

=> s ((iron(l)oxide(l)hydroxide or ferric(l)hydroxide(l)oxide or hydrated(l)ferric(l)oxide))

871747 IRON
10990 IRONS
872511 IRON
(IRON OR IRONS)

1442415 OXIDE
315845 OXIDES
1534995 OXIDE

(OXIDE OR OXIDES)
 238454 HYDROXIDE
 41334 HYDROXIDES
 258965 HYDROXIDE
 (HYDROXIDE OR HYDROXIDES)
 6084 IRON(L) OXIDE(L) HYDROXIDE
 67319 FERRIC
 1 FERRICS
 67320 FERRIC
 (FERRIC OR FERRICS)
 238454 HYDROXIDE
 41334 HYDROXIDES
 258965 HYDROXIDE
 (HYDROXIDE OR HYDROXIDES)
 1442415 OXIDE
 315845 OXIDES
 1534995 OXIDE
 (OXIDE OR OXIDES)
 1339 FERRIC(L) HYDROXIDE(L) OXIDE
 56502 HYDRATED
 1 HYDRATEDS
 56503 HYDRATED
 (HYDRATED OR HYDRATEDS)
 67319 FERRIC
 1 FERRICS
 67320 FERRIC
 (FERRIC OR FERRICS)
 1442415 OXIDE
 315845 OXIDES
 1534995 OXIDE
 (OXIDE OR OXIDES)
 407 HYDRATED(L) FERRIC(L) OXIDE
 L3 7038 ((IRON(L) OXIDE(L) HYDROXIDE OR FERRIC(L) HYDROXIDE(L) OXIDE OR
 HYDRATED(L) FERRIC(L) OXIDE))

 => s goethite or lepidocrocite or limonite
 8626 GOETHITE
 261 GOETHITES
 8646 GOETHITE
 (GOETHITE OR GOETHITES)
 1323 LEPIDOCROCITE
 24 LEPIDOCROCITES
 1326 LEPIDOCROCITE
 (LEPIDOCROCITE OR LEPIDOCROCITES)
 3772 LIMONITE
 187 LIMONITES
 3839 LIMONITE
 (LIMONITE OR LIMONITES)
 L4 12464 GOETHITE OR LEPIDOCROCITE OR LIMONITE

 => s aluminum(l)oxide(l)hydroxide
 818627 ALUMINUM
 292 ALUMINUMS
 818687 ALUMINUM
 (ALUMINUM OR ALUMINUMS)
 1442415 OXIDE
 315845 OXIDES
 1534995 OXIDE
 (OXIDE OR OXIDES)
 238454 HYDROXIDE
 41334 HYDROXIDES
 258965 HYDROXIDE
 (HYDROXIDE OR HYDROXIDES)
 L5 4537 ALUMINUM(L) OXIDE(L) HYDROXIDE

=> d his

(FILE 'HOME' ENTERED AT 06:00:23 ON 21 JAN 2004)

FILE 'CAPLUS' ENTERED AT 06:01:59 ON 21 JAN 2004

L1 128127 S TEXTILE
L2 6084 S IRON(L)OXIDE(L)HYDROXIDE
L3 7038 S ((IRON(L)OXIDE(L)HYDROXIDE OR FERRIC(L)HYDROXIDE(L)OXIDE OR H
L4 12464 S GOETHITE OR LEPIDOCROCITE OR LIMONITE
L5 4537 S ALUMINUM(L)OXIDE(L)HYDROXIDE

=> s l1 and l3 and l4 and l5

L6 1 L1 AND L3 AND L4 AND L5

=> d l6 bib,abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:467977 CAPLUS
DN 131:103477
TI **Textile** surface coatings of iron oxide and aluminum oxide
IN Kuhn, Hans H.; Kang, Peter K.
PA Milliken & Co., USA
SO U.S., 8 pp.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5928720	A	19990727	US 1998-7687	19980115
PRAI	US 1998-7687		19980115		

AB A method of coating a **textile** substrate comprises (a) contacting a **textile** substrate with an aq. soln. of a ferrous or **ferric** salt and salt of Al at pH .apprx.2.5 or greater, wherein the aq. soln. optionally comprises a compd. which produces ammonia by hydrolysis in aq. soln., a buffering and pH controlling system, and a dispersing agent; (b) heating the soln. to .apprx.50.degree. to .apprx.100.degree.; (c) hydrolyzing and oxidizing the ferrous ion, or hydrolyzing the **ferric** ion, to form an **iron (III) oxide hydroxide** and hydrolyzing the Al ion to form an **aluminum oxide hydroxide**, nucleating the **iron (III) oxide hydroxide** and **aluminum oxide hydroxide** in situ at the surface of the substrate, wherein the **oxide hydroxides** are present as particles which are sub-colloidal in size, thereby forming a substantially amorphous coherent **iron (III) oxide hydroxide/aluminum oxide hydroxide** coating on the substrate surface; wherein the resultant rates of adsorption onto the substrate surface of the **oxide hydroxides** are greater than the resultant rates of formation of the same **oxide hydroxides**. The obtained substrate has very good color fastness, bacteriostatic, and virus removing properties and can be utilized as an water filtration article. Thus, a coating on a polyester fabric was prepd. from a soln. contg. Mohr's salt 15, Al₂(SO₄)₃.cntdot.18H₂O 3.75, urea 10, formic acid 2.5, ammonium formate 2.64, and Rhodacal BX-78 1.2 g at pH .apprx.3.1.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

41.43

42.06

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

CA SUBSCRIBER PRICE

ENTRY

SESSION

-0.69

-0.69

STN INTERNATIONAL LOGOFF AT 06:08:06 ON 21 JAN 2004

$$\left[\begin{array}{c} \text{COO}^- \\ | \\ \text{HC}-\text{O} \\ | \\ \text{HO}-\text{CH} \\ | \\ \text{HC}-\text{O} \\ | \\ \text{HC}-\text{O} \\ | \\ \text{CH}_2\text{OH} \end{array} \right] \text{Fe} \begin{array}{c} \text{OH} \\ | \\ \text{OH} \end{array} \text{Fe} \begin{array}{c} \text{OH}_2 \\ | \\ \text{OH}_2 \end{array} \text{Fe} \begin{array}{c} \text{H}_2\text{O} \\ | \\ \text{H}_2\text{O} \end{array} \begin{array}{c} \text{ONa} \\ | \\ \text{ONa} \end{array} \quad \text{Ca}^{2+} \quad \left. \vphantom{\begin{array}{c} \text{COO}^- \\ | \\ \text{HC}-\text{O} \\ | \\ \text{HO}-\text{CH} \\ | \\ \text{HC}-\text{O} \\ | \\ \text{HC}-\text{O} \\ | \\ \text{CH}_2\text{OH} \end{array}} \right]_2$$
$$\begin{array}{c} \text{---OOCCH}_2 \\ \diagup \\ \text{NCH}_2\text{CH}_2\text{N} \\ \diagdown \\ \text{---OOCCH}_2 \end{array}$$

3979. Ferric Sub sulfate Solution. *Pharm.* soln; Monsel's soln. Approx: $\text{Fe}(\text{OH})_3$, FeSO_4 , and HNO_3 ; U.S.D. 25th ed. p. 1511.
Reddish-brown liquid. Almost odorless. Astringent taste. Acid to litmus. *Alk.* 1.548. Miscible with water, alcohol.